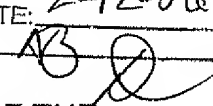


PATENT COOPERATION TREATY

DOCKETED

From the
INTERNATIONAL SEARCHING AUTHORITY

JUL 13 2005

PCT
DUE DATE: 2-12-06
BY: 

To:

see form PCT/ISA/220

WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY
(PCT Rule 43bis.1)

Date of mailing
(day/month/year) see form PCT/ISA/210 (second sheet)

Applicant's or agent's file reference
see form PCT/ISA/220

FOR FURTHER ACTION
See paragraph 2 below

International application No
PCT/US2005/012180

International filing date (day/month/year)
11.04.2005

Priority date (day/month/year)
12.04.2004

International Patent Classification (IPC) or both national classification and IPC
G07C5/00, H04L29/06

Applicant
NNT, INC.

1. This opinion contains indications relating to the following items:

- ☒ Box No. I Basis of the opinion
- ☐ Box No. II Priority
- ☐ Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- ☐ Box No. IV Lack of unity of invention
- ☒ Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- ☐ Box No. VI Certain documents cited
- ☐ Box No. VII Certain defects in the international application
- ☐ Box No. VIII Certain observations on the international application

2. FURTHER ACTION

If a demand for international preliminary examination is made, this opinion will usually be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA"). However, this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1bis(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of three months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

For further options, see Form PCT/ISA/220

3. For further details, see notes to Form PCT/ISA/220

Name and mailing address of the ISA:



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Box No. I Basis of the opinion

1. With regard to the **language**, this opinion has been established on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.
 - ☐ This opinion has been established on the basis of a translation from the original language into the following language , which is the language of a translation furnished for the purposes of international search (under Rules 12.3 and 23 1(b)).
2. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application and necessary to the claimed invention, this opinion has been established on the basis of:
 - a. type of material:
 - ☐ a sequence listing
 - ☐ table(s) related to the sequence listing
 - b. format of material:
 - ☐ in written format
 - ☐ in computer readable form
 - c. time of filing/furnishing:
 - ☐ contained in the international application as filed.
 - ☐ filed together with the international application in computer readable form.
 - ☐ furnished subsequently to this Authority for the purposes of search.
3. ☐ In addition, in the case that more than one version or copy of a sequence listing and/or table relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.
4. Additional comments:

**WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY**

International application No
PCT/US2005/012180

**Box No. V Reasoned statement under Rule 43*bis*.1(a)(i) with regard to novelty, inventive step or
industrial applicability; citations and explanations supporting such statement**

1. Statement

Novelty (N)	Yes: Claims	1-20
	No: Claims	
Inventive step (IS)	Yes: Claims	1-20
	No: Claims	
Industrial applicability (IA)	Yes: Claims	1-20
	No: Claims	

2. Citations and explanations

see separate sheet

V.

1. Reference is made to the following document:

D1: WO 03 077 205 A2

2. The subject-matter of independent claims 1, 11 and 19 is deemed to meet the requirements of Article 33(1) PCT for the following reasons.

Document D1 is regarded as being the closest prior art to the subject-matter of the present application. Using the wording of the common features of claims 1, 11 and 19 as far as possible, document D1 (cf. in particular page 3, paragraph 21 to page 9, paragraph 38; Figs.1, 2) discloses (the references in parentheses applying to this document):

A vehicle information system (100) comprising:

- a computing system (105) adapted to run an operating system (paragraph 48) and a plurality of applications (paragraphs 28 and 38),

- at least one vehicle application (108, 110) operable to provide policy processing of at least one parameter (such as data relating to e.g. fleet management, vehicle diagnostics, etc.), the at least one vehicle application being executable by the computing system (p.4, l.8-14);

- an access-layer application (202a) executable by the computing system (paragraph 32), the access-layer application having a first or application program interface ("API"; 106) adapted to communicate with the vehicle application (paragraph 30),

- a vehicle-application database (202b) operable to house information for processing at least one parameter passed *to the* first or application program interface (paragraphs 33 and 34), the access-layer application (202a) operable *to* obtain from the vehicle-application database (202b) the information for processing the at least one parameter (p.7, l.8-12), and operable to process the at least one parameter as a function of the information obtained from the vehicle-application database (p.7, l.5-8) so as to pass the processed at least one parameter *to* the first or application program interface (106) in a form commensurate with the first or application program interface (p.8, l.13-22); and

a communication adapter (202c) operable to pass the at least one parameter to a vehicle controller (paragraphs 35 and 36).

Thus, the subject-matter of the common technical concept of independent claims 1, 11 and 19 differs from this known vehicle information system substantially in that the access layer application is additionally provided with a second or operating-system-abstraction interface which is adapted to communicate with the operating system and from which the at least one parameter is passed to the vehicle controller, wherein the processed parameter is passed between the first and second interfaces in a form commensurate with both these interfaces.

Since none of the available prior art documents shows the common technical concept of the independent claims, the subject-matter of claims 1, 11 and 19 is novel and thus meets the requirements of Article 33(2) PCT.

The problem to be solved by the present invention may be regarded as to provide a standardized infrastructure which supports portable, cross-platform vehicle applications and is independent of the specifications of the individual components of the vehicle information system.

The solution to this problem proposed in independent claims 1, 11 and 19 of the present application is considered as involving an inventive step (Article 33(3) PCT) for the following reasons:

While document D1 (cf. paragraph 48 bridging pages 11 and 12) itself does contain an indication to additionally provide a second or operating-system-abstraction interface so as to make the operation of the vehicle applications independent of a particular operating system, it lacks any information with respect to the processing of the at least one parameter. More specifically, document D1 is silent that the parameter is processed based on information stored in the vehicle-application database such that it can be passed between the first or application program interface and the second or operating-system-abstraction interface in a form commensurate with both these interfaces.

Accordingly, the person skilled in the art who starts out from document D1 and tries to find

a solution to the problem mentioned above might well additionally include in the access-layer application a second or operating-system-abstraction interface respectively adapted to communicate with the operating system. However, he will not modify the vehicle information system known from document D1 (Fig.2) such that the vehicle-application database (202b) includes information based on which the at least one parameter is processed in such a way that it can be passed over these two interfaces in a form corresponding to both.

The remaining documents cited in the international search report are more remote than document D1 from the common concept of the independent claims 1, 11 and 19.

Therefore, since the skilled person would not have arrived at the subject-matter of the independent claims in an obvious way in view of the available prior art, the subject-matter of claims 1, 11 and 19 is also based on an inventive step and thus complies with the requirements of Article 33(3) PCT.

3. Claims 2 to 10, 12 to 18 and 20 are respectively dependent on claims 1, 11 and 19 and as such also meet the requirements of the PCT with respect to novelty and inventive step.